California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM NO. R1-2007-0089
WDID No. 1B002090NMEN
FOR
USA GASOLINE CORPORATION

1301 State Street
Ukiah, California
Mendocino County

This Monitoring and Reporting Program Order replaces all previous monitoring and reporting directives issued by the Regional Water Board for the USA Gasoline Station #206 site.

GROUNDWATER MONITORING

1. Prior to purging each monitoring well for sampling, each well shall be checked for the presence or absence of free product. If free product is present, the thickness shall be measured to the nearest 0.01-foot.
2. Prior to purging, the depth to groundwater shall be measured to the nearest 0.01-foot. The groundwater elevations for each monitoring event shall be reported in tabular form indicating the top of casing elevation, the groundwater elevation referenced to mean sea level and the actual depth to groundwater.
3. Prior to purging, the observation monitoring wells MW-4, MW-10, MW-11, MW-12, MW-14, MW-23, MW-24, MW-25, EX-3, and EX-5 shall be tested monthly for the process control parameters: Oxidation-Reduction Potential, pH, Temperature, Specific Conductivity and Dissolved Oxygen.

   The protocols for the field-tested parameters must ensure that the water quality data has not been altered by exposure of groundwater samples to atmosphere. Field instrument calibration protocols and records must be presented with the field data.
4. Groundwater samples from the observation monitoring wells MW-4, MW-10, MW-11, MW-14, MW-23, MW-24, and EX-5 shall be analyzed quarterly for the following potentially mobilized constituents of concern:
   a. Bromate;
   b. Dissolved metals: total chromium, hexavalent chromium, lead, molybdenum, selenium, vanadium, and uranium.
5. Groundwater samples from monitoring wells MW-1 through MW-25 shall be analyzed quarterly for the following constituents of concern:
   a. Total Petroleum Hydrocarbons measured as gasoline and as diesel;
   b. Benzene, toluene, ethyl benzene, and xylenes;

c. Fuel oxygenates: methyl tert-butyl ether, tert-amyl methyl ether, and tert-butyl alcohol.

6. Chemical analyses must be performed by a laboratory certified by the State of California Department of Health Services.

7. Analytical methods for sample analyses shall achieve practical quantification reporting limits that are adequate for evaluating regulatory action levels for each constituent. A table of common laboratory reporting limits for the constituents of concern is incorporated in this Order as Appendix A.

REPORTING

8. Monitoring reports shall be submitted to the North Coast Regional Water Quality Control Board at 5550 Skylane Boulevard, Suite A, Santa Rosa, California, 95403 according to the following schedule:

Quarter	Reporting Period	Required Submittal Date
First Quarter	January, February, March	April 30th
Second Quarter	April, May, June	July 31st
Third Quarter	July, August, September	October 31st
Fourth Quarter	October, November, December	January 31st

9. Groundwater monitoring reports shall include the following elements:
   a. A narrative description of the work conducted;
   b. A groundwater elevation map for each sampling event;
   c. A contaminant distribution map showing isograms for constituents of concern detected in groundwater during the monitoring event;
   d. Analytical data tables including both current and historical analytical results;
   e. Copies of the well purging and sampling field logs; chain of custody documents; and signed laboratory reports including quality control data and explanations of analytical anomalies, if any. These supporting documents may be included as appendices to the report

10. Laboratory data, copies of monitoring reports, and depth to groundwater measurements shall also be submitted electronically to the State Water Resources Control Board's Geographic Environmental Information Management System database (GeoTracker).[1]

Ordered by _____
Robert R. Klamt
Interim Executive Officer

September 28, 2007

[1] Information on GeoTracker submittal requirements can be found at http://www.waterboards.ca.gov/ust/cleanup/electronic_reporting/index.html

ATTACHMENT A

Table of Commonly Achievable Minimum Detection Levels for Petroleum Constituents and ORP Sensitive Chemicals

CHEMICAL	Minimum Detection Level
Bromate	**5 µg/l** [2]
Bromide	**100 µg/l** [3]
Ethylene dibromide (Dibromoethane)	**0.5 µg/l**
1,2-Dichloroethane	**0.5 µg/l**
Petroleum Hydrocarbons (as gasoline)	**50 µg/l**
Petroleum Hydrocarbons (as diesel)	**50 µg/l**
Petroleum Hydrocarbons (as motor oil)	**50 µg/l**
Benzene	**0.5 µg/l**
Toluene	**0.5 µg/l**
Ethyl Benzene	**0.5 µg/l**
Xylenes	**0.5µg/l**
Methyl tertiary butyl ether (MTBE)	**0.5 µg/l**
Uranium (U)	**1 pCi/L** [4]
Hexavalent Chromium (Cr)	**5 µg/l**
Lead (Pb)	**0.5 µg/l**
Molybdenum (Mo)	**3 µg/l**
Selenium (Se)	**2 µg/l**
Vanadium (V)	**5 µg/l**

2 µg/l = micrograms per liter

3 Bromide is a naturally occurring constituent analyzed to identify its presence as a potential precursor for the formation of bromate under oxidative conditions.

4 pCi/L = picocuries per liter